

Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

AIR QUALITY PERMIT

Permittee Name: Gallatin Steel Company
Mailing Address: RR #1, Box 320, Ghent, KY 41045

is authorized to operate a steel mill and to construct/operate a second melt shop with associated equipment and a caster/tunnel furnace.

Source Name: Gallatin Steel Company
Mailing Address: RR#1, Box 320, Ghent, KY 41045
Source Location: U.S. Highway 42 West, Warsaw, Kentucky

Permit Type: Federally-Enforceable
Review Type: PSD, Title V

Permit Number: V-99-003
Log Number: F690
Application
Construction Date: 1998
Reconstruction Date: 07/1998
AFS Number: 21-07

SIC Code: 3312

Region: 4
County: Warrick

Issuance Date:
Expiration Date:

John E. Hornback, Director
Division for Air Quality

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SECTION A -- PERMIT AUTHORIZATION

Pursuant to a duly submitted application which was determined to be complete, the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant to the same.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in the Regulations, 401 KAR 1:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

Prior to commencing construction on 02(E2), the permittee is responsible for demonstrating that all BACT requirements for all emission units in the new modification have not changed from the BACT requirements in F-96-009(Revision 1). If any BACT requirements have changed, the permittee shall meet all new BACT requirements. Additionally, if any parameters have changed that affect the modeled ambient impacts in F-96-009(Revision 1), the permittee shall be responsible for performing additional appropriate modeling analyses.

SECTION B -- EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

01 (E1)

Description:

Existing melt shop, consisting of the following:

Twin-Shell DC EAF & continuous caster
Ladle and tundish bricking, deskulling, and brick tear-out
Shell bricking and brick tear-out
Two LMFs
One tundish dryer, 1.5 MMBtu/hr
One ladle dryer, 14 MMBtu/hr
One ladle dryer afterburner, 3 MMBtu/hr
Three ladle preheaters, 14 MMBtu/hr, each
Two tundish preheaters, 10 MMBtu/hr, each
Two tundish casting nozzle preheaters, 5 MMBtu/hr, each
Two stirring stations
Dump pit for handling use refractory materials
Control Equipment: positive pressure fabric filter baghouse
Construction commenced: April, 1993

APPLICABLE REGULATIONS:

- A. 401 KAR 51:017, Prevention of significant deterioration of air quality.
- B. 401 KAR 59:575, Standards of performance for plants: electric arc furnaces and argon decarburizers constructed after August 17, 1983 (40 CFR Part 60, Subpart C).
- C. 401 KAR 59:575, New process emissions.

1. Operating

a. The following materials usage rates (including the replacement of the heel) shall not be exceeded: Scrap: 270 tons/heat, Lime: 12 tons/heat, and Carbon/substitutes: 10 tons/heat. (Limit on PTE).

b. Scrap substitutes shall be limited to the following general categories: pig iron, direct reduced iron, iron oxide and briquetted iron. (Limit on PTE). The following materials generated on-site may be added to the EAF: dropout chamber contents; spark

Operating Limitations continued:

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

arrestor dust; roll grinding swarf; baghouse bags; personal protective equipment from baghouse and ductwork maintenance; and baghouse dust.

c. The permittee shall primarily use high grade, low residual, preprocessed scrap. (BACT).

d. The permittee shall not add into the EAF any charged iron or any other metal substitutes with a sulfur content greater than 0.65. (BACT).

e. The permittee shall properly maintain and operate the side-wall burners (located within the EAF shell) in accordance with manufacturer's guidelines. Side-wall burners may be removed and/or replaced if the permittee demonstrates to the Administrator's satisfaction that compliance with the BACT limitations listed herein can be achieved. (BACT).

f. Steel production rate shall not exceed 200 tons per hour (combined production rate, averaged over 24 hours) from the twin shell EAF. Simultaneous operations in both shells is prohibited. (Limit on PTE).

g. The permittee is only authorized to operate the source under operating scenarios that were in use when compliance was demonstrated.

h. The permittee shall use necessary and reasonable precautions to control particulate emissions from the handling of the refractory materials.

2. Emission Limitations:

a. The permittee shall comply with the requirements of 40 CFR 60.272a, Standard for Particulate Matter, under the following conditions and requirements are listed herein. As provided in 40 CFR 60.272a, the visibility as determined by USEPA's Method 9 shall meet the following:

a. Less than three (3) percent opacity exiting the meltshop's baghouses;

b. Less than ten (10) percent opacity from the dust handling system; and

c. Less than five (5) percent opacity from the meltshop due solely to the operations of the meltshop.

Emission Limitations Continued:

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

b. The visible emissions as determined by USEPA's Method 9 from operation of all other emission units in the melt shop not subject to 40 CFR 60.272a shall be less than 20 percent. (401 KAR 59:010).

c. The total particulate emission rate shall not exceed 16.05 lb/hr. (BACT).

d. The particulate grain loading as measured at the control device exit by Reference Method 5D, 40 CFR 60, Appendix A, shall not exceed 0.0018 grain/dscf. (BACT).

e. The total carbon monoxide emission rates shall not exceed 400 lbs/hr and 2 lbs/ton of liquid steel. (BACT).

The permittee shall provide reasonable assurance of continuing compliance with the total carbon monoxide emission rates by operating the EAF such that the CO emission rate over the applicable averaging period, is less than or equal to 400 lbs/hr, as given by the following formula:

$$\text{lb(CO)/hr} = (C) \times (\text{SCFM}) \times (4.364 \times 10^{-6} \text{ (lb/SCFM/ppm)})$$

WHERE: C = hourly average CEM concentration over 24 hours in ppm
SCFM = exhaust rate at standard conditions, determined from testing

The permittee shall provide reasonable assurance of continuing compliance with the 2 lbs/ton of liquid steel produced limitation on carbon monoxide emissions as indicated by the following formula:

$$\text{lb/ton steel} = (A) / (B)$$

WHERE: A = lb(CO)/hr averaged over the 24 hour production day
B = tonnage ton per hour averaged during the 24 hour production day

The exhaust rate is determined using the testing methodology delineated under Section 3.e. above.

If the CEM data (see Section 3.e. for block averages) recorded in a calendar quarter show excursions from the hourly emission limit that occur in the aggregate for more than 5% of the total number of 24 hour sets generated during the quarter, the permittee shall contact the

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)****Emission Limitations Continued:**

Division within thirty (30) days of aggregation of said excursions to schedule a performance test to demonstrate compliance with the carbon monoxide emission rate. The permittee shall conduct the performance test within ninety (90) days from the date it is required by the Division. The Division may waive this testing requirement upon demonstration that the cause of the excursions has been corrected. If the permittee demonstrates to the Division that the Division concurs, that CO emissions for two consecutive years are shown to be less than or equal to 75% of the standard specified herein based upon CEM data, then the permittee may discontinue collection of the hourly CEM concentration data.

f. The total nitrogen oxides emission rates, expressed as NO_x, shall not exceed 102 lbs/hr and 0.51 lb/ton of liquid steel. (BACT).

The permittee shall provide reasonable assurance of compliance with the total nitrogen oxide emission rate by operating the EAF such that the NO_x concentration, expressed as lbs/hr, over the applicable averaging period, is less than or equal to 102 lbs/hr, as indicated by the following formula:

$$\text{lb(NO}_x\text{)/hr} = (\text{N}) \times (\text{SCFM}) \times (7.17 \times 10^{-6} \text{ (lb-SCFM/ppm-hr)})$$

WHERE: N = hourly average CEM concentration over 24 hours, ppm
SCFM = exhaust rate at standard conditions determined from testing

The permittee shall provide reasonable assurance of continuing compliance with the 0.51 lb/ton of liquid steel produced limitation on nitrogen oxide emissions as indicated by the following formula:

$$\text{lb NO}_x/\text{ton steel} = (\text{AN}) / (\text{P})$$

WHERE: AN = lb(NO_x)/hr over the 24 hour production day
P = average tons of liquid steel poured during the 24 hour production day

The exhaust rate is determined using the testing methodology delineated under Section 3.1.1, below.

If the CEM data (sets of 24-hour block averages) recorded in a calendar quarter show excursions from the hourly emission limit that occur in the aggregate for more than 5% of the total number of 24-hour sets generated during the quarter, the permittee shall contact the

Emission Limitations Continued:

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
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g. The total sulfur dioxide emission rates shall not exceed 0.2 lb/ton of liquid steel. (BACT).

h. The total lead emission rates shall not exceed 0.162 lb/hr and 0.00081 lb/ton of liquid steel. (BACT).

i. The total VOC emission rates shall not exceed 26 lb/hr and 0.13 lb/ton of liquid steel. (BACT).

3. Test Requirements.

a. The permittee shall comply with the requirements of 40 CFR 60.275a, Test methods and procedures. More stringent requirements are listed herein.

b. The permittee shall conduct annual performance tests, within 90 calendar days of the anniversary date of the last performance test (February 22, 1998) for NO_x, VOC, PM, CO, Pb and SO₂. If two consecutive annual tests result in specified emissions being less than or equal to 75% of the standard for VOC, PM, CO, Pb, and SO₂, specified herein, then no additional annual testing shall be required for that pollutant during the term of this permit. If two consecutive annual tests result in specified emissions being less than or equal to 75% of the standard for NO_x specified herein, and the permittee chooses to continue the hourly CEM data collection, then no additional annual testing shall be required for NO_x during the term of this permit.

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

- c. Performance tests shall be performed by the reference methods specified in Regulation 401 KAR 50:015, Section 1.

Testing Requirements Continued:

- d. If the performance tests and/or compliance demonstrations are not conducted at the EAF's maximum capacity as specified herein, the performance tests and/or compliance tests shall be repeated at 50 ton production increase intervals. The occurrence of a production increase shall be based on changes in the average steel production over consecutive heats. The permittee may petition the Division for Air Quality to request testing for certain pollutants at each of these production increase intervals.

- e. The exhaust rate of emissions referenced under Sections 2.e. and 2.f. is to be determined based upon measurement of flow rates in the canopy duct, Exhaust duct, and DEC duct, combined, and converted to standard conditions over three 8-hour periods under conditions representative of normal EAF operation. Exhaust rate measurements shall be determined by EPA Methods 1 through 4. The flow rate shall be determined within 90 days of the public notice of this draft permit. The permittee shall report to the Division supporting the determination of any revised exhaust rate to be used in providing compliance assurance through the formula specified in Sections 2.e. and 2.f., above. The exhaust rate is to be redetermined by the permittee if changes in operating conditions occur that would indicate that the previously determined exhaust rate is no longer representative of normal operating conditions, if the Division concurs.

4. Specific Monitoring Requirements:

- a. The permittee shall install and operate devices which continuously monitor and record SO₂ and CO concentrations of the gases in the duct leading to the baghouse, or other applicable locations. The monitoring devices shall be operated in compliance with performance specifications 2 and 3, respectively, as contained in 40 CFR Part 60, Appendix B. The SO₂ monitoring shall be 100 ppm. The permittee shall follow the applicable quality assurance procedures contained in 40 CFR Part 60, Appendix F, and the monitors shall be calibrated with gases of known concentrations equal to: 50 to 60 ppm; 20 to 30 ppm; 5 to 8 ppm.

- b. The permittee shall comply with the requirements of 40 CFR 60.274a, Monitoring of operations, unless more stringent requirements are listed herein. As provided in 40 CFR 60.274a, the operation of the emission capture system shall be monitored through checks, performed on a shift-per-shift basis, of the furnace static pressure, control system fan amperes and damper positions. The data gathered shall be compared against the values established

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

during the latest performance test and approved by the Division. Any deviation in the amperage of the fans used in exhausting the emissions to the baghouses more than " 15

Specific Monitoring Requirements Continued:

percent from the value established during the performance test and approved by the Division. The exceedance of the static pressure in the free space inside the EAFs above the level established during the latest performance test and approved by the Division, may be considered to be unacceptable operation and maintenance of this affected facility. The pressure monitoring device shall have an accuracy of plus or minus 5 mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions. Monitoring of the capture system performance shall also be performed through monthly operational status inspections of the equipment which is important to the performance of the total capture system (i.e., pressure sensors, dampers, and control switches). This inspection shall include observations of the physical appearance of the equipment for the presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated material in the ductwork, and fan erosion). Any deficiencies shall be noted and proper maintenance performed.

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

Specific Monitoring Requirements Continued:

c. The permittee shall comply with the requirements of 40 CFR 60.273a, Emission Monitoring, unless more stringent requirements are listed herein. As provided in 40 CFR 60.273a, the opacity monitoring, made by observations of the visible emissions from the baghouse, shall be performed by a certified visible emissions observer as follows:

\$ Visible emission observations shall be conducted at least once per day, during normal operation of the furnaces. At least once per week, a qualitative visual observation shall be conducted during operation of dust handling equipment of the baghouse.

\$ These observations shall be taken in accordance with Method 9, and, for at least three 6-minute periods, the opacity shall be recorded for each point(s) where visible emissions are observed.

\$ Where it is possible to determine that a number of these visible emissions relate to only one incident of visible emissions, one set of three 6-minute observations shall be required.

In this case, Method 9 observations must be made for the site of highest opacity which directly relates to the cause (or location) of visible emission observed during a single incident. The visible emission observations shall begin on the date the performance test required in this permit is completed.

d. The permittee shall make visual inspections of all shop cleaning equipment EAF to assure compliance with operating requirements in Section 1.

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

5. Specific Record Keeping Requirements:

- a. The permittee shall comply with the requirements of 40 CFR 60.276a, Record keeping and reporting requirements, unless more stringent requirements are listed herein.
- b. The permittee shall keep records of the sulfur contents, phosphorus, and ammonia carbon charged, and these records shall be available to Division personnel upon request.
- c. The permittee shall keep records of the amounts, grades, as well as a general description of the scrap or scrap substitutes, and these records shall be made available to Division personnel upon request.
- d. The permittee shall keep records of the maintenance and test parameters of the control equipment, and these records shall be made available to Division personnel upon request. The parameters shall include the pressure drop ranges, and those parameters required to be monitored by 40 CFR Subpart AAa.
- e. The permittee shall keep records of the NO_x (expressed as NO₂) concentrations recorded from the CEMs, steel production, and other data used to provide reasonable assurance of compliance with CO and NO_x emissions under the formula specified in Sections 2.e. and 2.f. above. These records shall be made available to Division personnel upon request.

6. Specific Reporting Requirements:

- a. The permittee shall comply with the requirements of 40 CFR 60.276a.
- b. The permittee shall submit quarterly written and electronically formatted reports to the Division Office containing the data provided by the continuous emissions monitoring system. All reports shall be submitted by the thirtieth (30th) day following the end of each reporting quarter and shall be submitted in the format specified by the division. The averaging periods for data reported shall correspond to the averaging periods specified herein for the emissions. The emissions shall be reported in ppm per hour, pounds per hour, pounds per ton of steel tapped, tons per reporting period, and cumulative tons per year for the preceding consecutive 12 month period. The permittee shall identify the methodology used to determine the above required information in the quarterly reports. NO_x emissions shall be reported as NO₂. A file shall be kept and maintained on the following items:

Reporting Requirements Continued:

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

- i.) Emission measurement (strip charts, etc.);
- ii.) Monitor performance testing measurements;
- iii.) Performance evaluations;
- iv.) Calibration checks;
- v.) Adjustments and maintenance performed on such monitoring device

c. Within 30 days of the end of each calendar quarter, the permittee shall submit to the Division a report containing the number of excursions above the CO and NO_x emission limitations that are indicated by the methodology established in Sections 2.e. and 2.f., above. The report shall include the date and time of the excursion, the indicated values of the excursions, and the percentage of EAF operating time during which excursions occurred in the calendar quarter.

7. Specific Control Equipment Operating Conditions:

The permittee shall install, properly maintain, and operate all control equipment in accordance with manufacturer's guidelines.

8. Alternate Operating Scenarios:

None.

9. Compliance Schedule:

Within 90 days of the public notice date of this permit, the permittee shall have installed, certified, and commenced use of the monitoring system for recording and reporting the data for the CO and NO_x emissions as provided in Sections 2.e. and 2.f.

10. Compliance Certification Requirements:

See Section

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

02 (E2)

Description:

New meltshop to be constructed, consisting of the following:

Twin-Shell EAF & continuous caster
Ladle and tundish bricking, deskulling, and brick tear-out
Shell bricking and brick tear-out
One LMF
One tundish dryer, 1.5 MMBtu/hr
One ladle dryer, 14 MMBtu/hr
One ladle dryer afterburner, 3 MMBtu/hr
Three ladle preheaters, 14 MMBtu/hr, each
Two tundish preheaters, 10 MMBtu/hr, each
Two tundish casting nozzle preheaters, 5 MMBtu/hr, each
Dump pit for handling used refractory materials
Control Equipment: positive pressure fabric filter baghouse
Construction commenced: August 1, 1997

APPLICABLE REGULATIONS:

- A. 401 KAR 51:017, Prevention of significant deterioration of air quality.
- B. 401 KAR 59:575, Standards of performance for steel plants, electric arc furnaces and argon-oxygen decarburization vessels constructed after August 17, 1983 (40 CFR Part 60, Subpart AAa).
- C. 401 KAR 59:010, New source operations.

1. Operating Limitations:

a. The maximum raw material input rates (including the replacement of the heel) shall not be exceeded. Substitutes: 12 tons/heat, Lime: 12 tons/heat, and Carbon/substitutes: 7 tons/heat.

b. Scrap substitutes are limited to the following general categories: pig iron, direct reduced iron, iron cast briquetted iron. (Limit on PTE). The following materials generated on-site may be added into the EAF: dropout chamber contents; spark arrestor dust; roll grinding swarf; baghouse bags; personal protective equipment from baghouse and ductwork maintenance; and baghouse dust.

Operating Limitations (continued)

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

- c. The permittee shall primarily use high grade, low residual, preprocessed, inspected scrap. (BACT).
- d. The permittee shall not add into the EAFs any charged carbon or any other materials or substitutes with a sulfur content greater than 0.65. (BACT).
- e. The permittee shall properly maintain and operate the side-wall burners (located within the EAF shell) in accordance with manufacturer's guidelines. The side-wall burners may be removed and/or replaced if the permittee demonstrates to the Division's satisfaction that compliance with the BACT limitations listed herein can be achieved. (BACT).
- f. Steel production rate shall not exceed 200 tons per hour (average production rate, averaged over 24 hours) from the twin shell EAF. Simultaneous production in both shells is prohibited. (Limit on PTE).
- g. The permittee is only authorized to operate the system under the operating conditions that were in use when compliance was demonstrated.
- h. The permittee shall use necessary and reasonable pollution control measures to control particulate emissions from the handling of the used refractory materials.

2. Emission Limitations:

- a. The permittee shall comply with the requirements of 40 CFR 60.272a, Standard for Particulate Matter, unless more stringent requirements are listed herein. As provided in 40 CFR 60.272a, the visible emissions as determined by USEPA's Method 9 shall meet the following limits:

Less than ten (10) percent opacity exiting the meltshop's baghouses;
Less than ten (10) percent opacity from the dust handling system; and
Less than six (6) percent opacity from the meltshop due solely to the operations of the EAFs.

- b. The visible emissions determined by USEPA's Method 9 from operation of all other emission units in the facility not subject to 40 CFR 60.272a shall be less than 20 percent. (401 KAR 59:010).

Emission Limitations Continued

- c. The total particulate emission rate shall not exceed 16.05 lbs/hr. (BACT).

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

d. The particulate grain loading as measured at the control device exit by Reference Method 5D, 40 CFR 60, Appendix A, shall not exceed 0.0018 grain/dscf. (BACT).

e. The total carbon monoxide emission rates shall not exceed 400 lbs/hr and 2 lbs/ton of liquid steel. (BACT).

The permittee shall provide reasonable assurance of continuous compliance with the carbon monoxide emission rate by operating the EAF such that the CO concentration, over the applicable averaging period, is less than or equal to 400 lbs/hr as indicated by the following formula:

$$\text{lb(CO)/hr} = (C) \times (\text{SCFM}) \times (4.364 \times 10^{-6} \text{ (lb-SCFM/ppm/hr)})$$

WHERE: C = hourly average CEM concentration over 24 hours
SCFM = exhaust rate at standard conditions determined from

The permittee shall provide reasonable assurance of continuous compliance with the lbs/ton of liquid steel produced limitation on carbon monoxide emission rates as indicated by the following formula:

$$\text{lb/(CO)/ton steel} = (AC)/(P)$$

WHERE: AC = lb(CO)/hr average over the 24 hour production day
P = average ton per hour steel poured during the 24 hour production day

The exhaust rate is to be determined using the measurement methodology delineated under Section 3.g., below.

If the data (set of 15 minute block averages) recorded in a calendar quarter show excursions of the hourly emission rate that occur in the aggregate for more than 5% of the total number of hour sets generated during the quarter, the permittee shall contact the Division within 30 days of the end of said excursions to schedule a performance test to determine compliance with the carbon monoxide emission rate. The permittee shall conduct the performance test within ninety (90) days from the date it is required to contact the Division. The Division may waive this testing requirement upon a demonstration that the cause of the excursions has been corrected.

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)****Emission Limitations Continued**

If the permittee demonstrates to the Division, and the Division concurs, that CO emissions for two consecutive years are shown to be less than or equal to 75% of the standard established herein based upon CEM data, then the permittee may discontinue collection of the CO concentration data.

f. The total nitrogen oxides emission rate, expressed as NO_x , shall not exceed 102 lbs/day and 0.51 lb/ton of liquid steel. (BACT).

The permittee shall provide reasonable assurance of continuing compliance with the total nitrogen oxide emission rate by operating the EAF such that the NO_x emission rate, expressed as NO_x , over the applicable averaging period, is less than or equal to the rate as indicated by the following formula:

$$\text{lb}(\text{NO}_x)/\text{hr} = (\text{N}) \times (\text{SCFM}) \times (7.17 \times 10^{-6}) (\text{lb-SCFM/ppm-hr})$$

WHERE: N = hourly average CEM concentration, hours, ppm
SCFM = exhaust rate at standard conditions of 68°F and 1 atm testing

The permittee shall provide reasonable assurance of continuing compliance with the 0.51 lb/ton of liquid steel produced limitation on nitrogen oxide emissions as indicated by the following formula:

$$\text{lb}(\text{NO}_x)/\text{ton steel} = (\text{AN})/(\text{P})$$

WHERE: AN = lb/day average for 24 hour production day
P = ton of liquid steel produced during the 24 hour production day

The emission rate is to be determined using the testing methodology delineated under Section 3.g., below.

If the CEM (24 hour block averages) recorded in a calendar quarter show excursions from the emission limit that occur in the aggregate for more than 5% of the total number of 24 hours generated during the quarter, the permittee shall contact the Division within thirty days of aggregation of said excursions to schedule a performance test to demonstrate compliance with the nitrogen oxides emission rate. The permittee shall conduct the performance test within ninety (90) days from the date it is required to contact the Division. The Division may waive this testing requirement upon a demonstration that the cause of the excursions has been corrected.

Limitations Continued:

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

If the permittee demonstrates to the Division, and the Division concurs, that NO_x emissions for two consecutive years are shown to be less than or equal to 75% of the hourly standard specified herein based upon CEM data, then the permittee may discontinue collection of hourly CEM concentration data. However, if later performance testing shows that NO_x emissions are greater than 75% of the hourly standard, then the hourly CEM data collection must be resumed.

g. The total sulfur dioxide emission rates shall not exceed 0.1 lb/ton and 0.2 lb/ton of liquid steel. (BACT).

h. The total lead emission rates shall not exceed 0.162 lb/ton and 0.2 lb/ton of liquid steel. (BACT).

i. The total VOC emission rates shall not exceed 0.13 lb/ton of liquid steel. (BACT).

3. Testing Requirements:

a. The permittee shall comply with the requirements of 40 CFR 60.275a, Test methods and procedures, unless more stringent requirements are listed herein.

b. Within 60 days after achieving the maximum production rate at which the affected facilities will be operated, but not later than 90 days after start-up of such facilities listed herein, the permittee shall conduct performance tests for E2(02) (New meltshop baghouse exhaust) for NO_x, VOC, PM, SO₂, and Pb emissions and furnish the Division with a written report of the results of such performance tests.

c. The permittee shall conduct annual performance tests, within 90 calendar days of the anniversary of the initial permit test for NO_x, VOC, PM, CO, Pb and SO₂. If two consecutive annual tests result in specified emissions being less than or equal to 75% of the standard for VOC, PM, CO, Pb, and SO₂, specified herein, then no additional annual testing for that pollutant shall be required during the term of this permit. If two consecutive annual tests result in specified emissions being less than or equal to 75% of the standard for NO_x, specified herein, and the permittee chooses to continue the hourly

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

Testing Requirements Continued

CEM data collection, then no additional annual testing shall be required for NO_x during the term of this permit.

d. Performance tests shall be performed by the reference method specified in 401 KAR 50:015, Section 1.

e. The PM from the PM compliance tests shall be analyzed to determine the emissions of copper, antimony, arsenic, beryllium, cadmium, cobalt, manganese, mercury, nickel, selenium, vanadium, calcium oxide, aluminum, chromium molybdenum (VI and III), molybdenum, and zinc. This analysis is only required for the first test on the EAF. (State-origin requirement).

f. If the performance tests and/or compliance demonstrations are not conducted at the EAF's maximum capacity as specified herein, the performance tests and/or compliance tests shall be repeated at 50 ton production increase interval. The measurement of the production increase shall be based on changes in the average scrap per heat over three consecutive heats. The permittee may petition the Division for Air Quality for testing for certain pollutants at each of these production increase intervals.

g. The exhaust rate of emissions referenced under Sections 2.e. and 2.f., above, is to be determined based upon measurements of flow rates in the caster canopy duct, EAF canopy duct, and DEC duct, combined, and corrected to standard conditions over three 8-hour periods under conditions representative of normal EAF operations. The exhaust rate measurements shall be determined by EPA Methods 1 through 4. The flow rate shall be determined at the time of the testing required above. The permittee shall submit a report to the Division summarizing the determination of the exhaust rate that is to be used in providing compliance assurance through the formula specified in Sections 2.e. and 2.f., above. The exhaust rate shall be redetermined by the permittee if changes in operating conditions occur that would make the previously determined exhaust rate is no longer representative of normal operating conditions, and a petition concurs.

4. Specific Monitoring Requirements:

a. The permittee shall maintain and operate devices which continuously monitor and record the NO_x and CO concentrations of the gases in the duct leading to the

Specific Monitoring Requirements Continued:

baghouse, or other approved locations. The NO_x and CO monitors shall be operated in compliance with performance specifications 2 and 4, respectively, as contained in 40 CFR

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

Part 60, Appendix B. The span values for the monitors shall be 100 ppm. The permittee shall follow the applicable quality assurance procedures contained in 40 CFR Part 60, Appendix F, and the monitors shall be calibrated with gases of known concentrations equal to 10 to 60 ppm; 20 to 30 ppm; 5 to 8 ppm; and zero.

b. The permittee shall comply with the requirements of 40 CFR 60.274a, Monitoring of operations, unless more stringent requirements are listed here. As provided in 40 CFR 60.274a, the operation of the emission capture system shall be monitored through checks performed on a once-per-shift basis, of the furnace static pressure, control system fan amperes, and damper positions. The data gathered shall be compared to the values established during the latest performance test and approved by the Division. Any deviation in the amperage of the fans used in exhausting the emissions to the baghouse more than "15 percent from the value established during the performance test and approved by the Division and any exceedance of the static pressure in the free space inside the baghouse to the level established during the latest performance test and approved by the Division may be considered to be unacceptable operation and maintenance of this affected facility. The pressure monitoring device shall have an accuracy of ± 5 mm of water column over its normal operating range and shall be calibrated according to the manufacturer's instructions.

Specific Monitoring Requirements Continued:

Monitoring of the capture system performance shall also be performed through monthly operational status inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches). This inspection

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be noted and proper maintenance performed.

c. The permittee shall comply with the requirements of 40 CFR 60.273. Monitoring, unless more stringent requirements are listed herein, as provided in 60.273a, the opacity monitoring, made by observations of the visible emissions from the baghouse, shall be performed by a certified visible emissions observer as follows:

\$ Visible emission observations shall be conducted at least once per day during on-line operation of the furnaces. At least once per week, a qualitative visual observation shall be conducted during operation of dust handling equipment of the furnace.

\$ These observations shall be taken in accordance with Method 9. At least three 6-minute periods, the opacity shall be recorded for each point(s) where visible emissions are observed.

\$ Where it is possible to determine that a number of these visible emissions are due to only one incident of visible emissions, one set of three 6-minute observations will suffice. In this case, Method 9 observations must be made for the highest opacity, which directly relates to the cause (or location) of visible emissions from a single incident. The visible emission observations shall begin on the date the test required in this permit is completed.

\$ These observations shall be taken in accordance with Method 9. At least three 6-minute periods, the opacity shall be recorded for each point(s) where visible emissions are observed.

d. The permittee shall make visual inspections of scrap charged into the EAF to assure compliance with operating requirements in Section 4.

5. Specific Record Keeping Requirements:

a. The permittee shall comply with the requirements of 40 CFR 60.276a, Record keeping and reporting, unless more stringent requirements are listed herein.

b. The permittee shall keep records of the sulfur contents, analyses, and amounts of carbon charged. These records shall be made available to Division personnel upon request.

Specific Record Keeping Requirements Continued:

c. The permittee shall keep records of the amounts, types, as well as a general description of the scrap or scrap substitutes, and these records shall be made available to Division personnel upon request.

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

d. The permittee shall keep records of the maintenance and operating parameters of the control equipment, and these records shall be made available to Division personnel upon request. The parameters shall include the pressure drop ranges, and those parameters required to be monitored by 40 CFR Subpart AAa.

e. The permittee shall keep records of the CO and NO_x (expressed as ppm) concentrations recorded from the CEMs, steel production data, and other data used to provide reasonable assurance of compliance with CO and NO_x emission limitations under the form specified in Sections 2.e. and 2.f., above. These records shall be made available to Division personnel upon request.

6. Specific Reporting Requirements:

a. The permittee shall comply with the reporting requirements of 40 CFR 276a.

b. The permittee shall provide quarterly written and electronically formatted reports to the Division's Frankfort Central Office containing the information required by the control emission devices. All reports shall be post marked and submitted no later than the 10th day following the end of each calendar quarter and shall be submitted in the form specified by the Division. The averaging periods used for data reporting shall correspond to the averaging periods specified herein for emission limitations. The emissions shall be reported in ppm per hour, pounds per hour, pounds per ton of liquid steel tapped, tons per reporting period, and cumulative tons per year for the previous consecutive 12 month period. The permittee shall identify the methodology used to determine the above required information in the quarterly reports. NO_x emissions shall be reported as NO₂. A file shall be kept and maintained on the following items:

- (1) Emission measurement (strip chart or electronic);
- (2) Monitoring device testing measurements;
- (3) Performance tests;
- (4) Calibration records;
- (5) Maintenance and repair performed on such monitoring devices.

c. Within the end of each calendar quarter, the permittee shall submit to the Division a report containing the number of excursions above the CO and NO_x emission

Specific Reporting Requirements (Continued):

limitations that are indicated by the methodology established under Sections 2.e. and 2.f., above. The report shall include the date and time of the excursions, the indicated values of the excursions, and the percentage of EAF operating time during which excursions occurred in each calendar quarter.

Specific Control Equipment Operating Conditions:

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

The permittee shall install, properly maintain, and operate the control equipment in accordance with manufacturer's guidelines.

8. Alternate Operating Scenarios:

None.

9. Compliance Schedule:

None

10. Compliance Certification Requirements:

See Section F.

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

03 & 04 (R1)

Description:

Slab Reheat Tunnel Furnace (80.7 MMBtu/Hour)

Construction commenced: April, 1993

APPLICABLE REGULATIONS:

401 KAR 51:017, Prevention of significant deterioration of air quality

1. Operating Limitations:

- a. The permittee shall use only natural gas as fuel. (BACT).
- b. The reheat tunnel furnace shall be equipped with low NO_x burners designed to maintain 0.09 lb/MM Btu). (BACT).
- c. The total natural gas use shall not exceed 59 MMBtu/hr averaged over a three-month rolling period, and 707 MMcf/yr (Limit on STE).

2. Emission Limitations:

- a. Nitrogen oxides emission rates, expressed as NO₂, shall not exceed 7.26 lbs/hr and 0.09 lb/MM Btu. (BACT).
- b. The carbon monoxide emission rates shall not exceed 2.83 lbs/hr and 35 lbs/MMcf. (BACT).

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

The permittee shall monitor natural gas usage on a monthly basis.

5. Specific Record Keeping Requirements:

The permittee shall keep records of the monthly natural gas usage in MMcf.

Specific Reporting Requirements:

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

The permittee shall provide a written monthly report, within 30 days following the end of each month, of the reheat furnaces monthly natural gas usage in MMcf/month. The report shall be mailed to the Division's Florence Regional Office with a copy to the Frankfort Central Office.

7. Specific Control Equipment Operating Conditions:

None.

8. Alternative Operating Scenarios:

None.

9. Compliance Schedules:

None.

10. Compliance Certification Requirements:

See Section F.

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

05 & 06 (R2)

Description:

Slab Reheat Tunnel Furnace (80.7 MMBtu/Hour)
Construction commenced: August 1, 1997

APPLICABLE REGULATIONS:

401 KAR 51:017, Prevention of significant deterioration of air quality

1. Operating Limitations:

- a. The permittee shall use only natural gas as fuel. (BACT).
- b. The reheat tunnel furnace shall be equipped with low NO_x burners designed to maintain 0.09 lb/MM Btu). (BACT).
- c. The total natural gas use shall not exceed 59 MMBtu/day averaged over a three-month rolling period, and 707 MMcf/year (Limit on TE).

2. Emission Limitations:

- a. Nitrogen oxides emission rates, expressed as NO₂, shall not exceed 7.26 lbs/hr and 0.09 lb/MM Btu. (BACT).
- b. The carbon monoxide emission rates shall not exceed 2.83 lbs/hr and 35 lbs/MMcf. (BACT).

3. Testing Requirements:

Within 180 days after achieving maximum production rate at which the affected facilities shall be in operation, but not later than 180 days after startup of such facilities, the owner or operator shall conduct a performance test on R2 (05 & 06) for NO_x and furnish the Division of Environmental Protection a written report of the results of such performance test.

4. Specific Monitoring Requirements:

The permittee shall monitor the natural gas usage on a monthly basis.

Specific Record Keeping Requirements:

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

The permittee shall keep records of the monthly natural gas usage in MMcf.

6. Specific Reporting Requirements:

The permittee shall provide a written monthly report, within 30 days following each month, of the reheat furnaces monthly natural gas usage in MMcf. The report shall be mailed to the Division's Florence Regional Office with a copy to the Frankfort Office.

7. Specific Control Equipment Operating Conditions:

None.

8. Alternative Operating Scenarios:

None.

9. Compliance Schedules:

None.

10. Compliance Certification Requirements:

See Section F.

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

(-) T1

Description:

Cooling Towers, including:

Tower #1, 1 cell (existing)

Tower #2, 3 cells (2 existing cells and 1 new cell)

Tower #3, 6 cells (3 existing cells and 3 new cells)

Construction commenced: April, 1993, for existing; August 1, 1997, for new

APPLICABLE REGULATIONS:

401 KAR 51:017, Prevention of significant deterioration of air quality

1. Operating Limitations:

a. The use of chromium based water treatment chemicals in the cooling towers is prohibited (40 CFR 63 Subpart Q).

b. Tower #1: Water flow rate to tower shall not exceed 6,000 gallons per minute. Total dissolved solids concentration shall not exceed 1,050 ppm. (Limit on PTE).

c. Tower #2: Water flow rate to tower shall not exceed 42,000 gallons per minute. Total dissolved solids concentration shall not exceed 1,050 ppm. (Limit on PTE).

d. Tower #3: Water flow rate to tower shall not exceed 103,156 gallons per minute. Total dissolved solids concentration shall not exceed 1,050 ppm. (Limit on PTE).

e. The permittee shall perform regular cooling tower maintenance as recommended by the vendor to ensure that 0.01% drift by weight is maintained at all times.

2. Emission Limits:

a. Tower #1: Particulate emission rate shall not exceed 0.3 lb/hr. (BACT).

b. Tower # 2: Particulate emission rate shall not exceed 2.8 lbs/hr. (BACT).

c. Tower # 3, Particulate emission rate shall not exceed 5.4 lbs/hr. (BACT).

Testing Requirements:

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

None.

4. Specific Monitoring Requirements:

The permittee shall monitor the total dissolved solids concentration or conductivity in the cooling towers= water.

5. Specific Record Keeping Requirements:

a. The permittee shall keep records of the cooling towers= water conductivity, and these records shall be made available to Division personnel upon request.

b. The permittee shall keep records of maintenance, and these records shall be made available to Division personnel upon request.

6. Specific Reporting Requirements:

None.

7. Specific Control Equipment Operating Conditions:

None.

8. Alternative Operating Scenarios:

None.

9. Compliance Schedule:

None.

10. Compliance Monitoring Requirements:

See Section F.

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

(-) RP, (-) TR

Description:

Various paved and unpaved roads within the plant boundaries.

Various paved and unpaved roads within the barge terminal boundaries.

Construction commenced: April, 1993 for plant roads, and July 1975, for terminal roads.

APPLICABLE REGULATIONS:

- A. 401 KAR 63:010, Fugitive emissions.
- B. 401 KAR 51:017, Prevention of significant deterioration of air quality.

Increases and decreases in emission rates at Gallatin Transit Authority, which includes barge unloading/loading facilities that are not associated with activities at the steel mill, are viewed as a separate independent entity. The permittee shall be responsible for demonstrating that activity is not associated with the steel mill.

1. Operating Limitations:

a. The permittee may pave any of the existing unpaved roads shown on permits from this Division. This does not authorize the extension, or construction, of any additional plant roads.

2. The permittee is authorized to operate 3.63 miles of paved roadways. (Limit on PIE).

3. The permittee is authorized to operate 1.0 miles of roadways. (Limit on PIE).

2. Emission Limitations:

None

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

None.

Specific Record Keeping Requirements:

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

The permittee shall keep records of the dates that it swept, and applied water/dust suppressants to roadways, and these records shall be made available to the Division personnel upon request.

6. Specific Reporting Requirements:

None.

7. Specific Control Equipment Operating Conditions:

The permittee shall employ a combination of the following to control fugitive emissions (both plant and terminal roads): sweeping for paved roads, watering and the use of dust suppressants, and restricting vehicles= speed on unpaved roads to 5 MPH which shall be enforced by the permittee. (Work Practice BACT).

8. Alternate Operating Scenarios:

None.

9. Compliance Schedule:

None.

10. Compliance Certification Requirements:

See Section F.

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

(-) BL

Description:

Barge terminal facilities consisting of:

Barge Loading (coal, coke, silicon, gypsum bark mulch)

Barge Unloading (steel scrap, coke, bark mulch)

Unloading: Conveyor to Stockpiles

Loading: Stockpiles to conveyor

Six Conveyor Transfer Points

Rotary Car Dump (coal)

Two Stockpiles (coal & coke)

Construction commenced: July, 1975, and April, 1986.

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions.

401 KAR 51:017, Prevention of significant deterioration of air quality.

Increases and decreases in emission rates of Gallatin Transit Authority's barge unloading/loading facilities that are not associated with activities at the steel mill shall be reviewed as a separate independent entity. The permittee shall be responsible for demonstrating that an activity is not associated with the steel mill.

1. Operating Limitations:

- a. Barge Loading rate shall not exceed 2,000 tons per hour. (Limit on PTE).
- b. Barge unloading rate shall not exceed 400 tons per hour. (Limit on PTE).
- c. Unloading conveyor transfer points shall not exceed 2,000 tons per hour. (Limit on PTE).
- d. Loading rate from stockpiles to conveyor shall not exceed 2,000 tons per hour. (Limit on PTE).
- e. Conveyor shall not exceed more than 2,000 tons per hour. (Limit on PTE).

Operating Limitations Continued:

- f. For the rotary car dump, maximum coal processing rate shall not exceed 2,000 tons per hour. (Limit on PTE).

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

2. Emission Limitations:

None.

3. Testing Requirements:

None.

4. Specific Monitoring Requirements:

The permittee shall perform monthly operational status inspections of emission facilities and dust suppression equipment. The observations shall include but not be limited to, the appearance of all equipment.

5. Specific Record Keeping Requirements:

The permittee shall keep records documenting maintenance performed on dust suppression equipment. These maintenance records shall be maintained and made available for inspection by the Division upon request.

6. Specific Reporting Requirements:

None.

7. Specific Control Equipment Operating Conditions:

- a. The permittee shall implement and/or surface control fugitive dust. (Work Practice BACT).
- b. The permittee shall operate and maintain dust suppression equipment in accordance with manufacturer's instructions and/or recommended operation practices. All deficiencies shall be noted and proper maintenance performed.
- c. The permittee shall comply with the standard operating procedure (SOP) plan that was submitted to the Division.

Specific Control Equipment Operating Conditions Continued:

- d. The permittee shall submit updates of changes in the SOP to the Division in semi-annual reports.

Alternative Operating Scenarios:

None.

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

9 Compliance Schedules:

None.

10. Compliance Certification Requirements:

See Section F.

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**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

(-) P1

Description:

Alloy storage piles

Construction commenced: April, 1993

APPLICABLE REGULATIONS:

- A. 401 KAR 63:010, Fugitive emissions.
- B. 401 KAR 51:017, Prevention of significant deterioration of air quality.

1. Operating Limitations:

All alloy storage piles shall be enclosed on three sides with concrete walls. (Work under contract).

2. Emission Limitations:

None.

3. Testing Requirements:

None.

4. Specific Monitoring Requirements:

None.

5. Storage and Keeping Requirements:

None.

6. Specific Equipment Requirements:

None.

Specific Control Equipment Operating Conditions:

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

a. The permittee shall comply with the standard operating procedure (SOP) plan that was submitted to the Division.

2. The permittee shall submit updates of changes in the SOP to the Division in semi-annual reports.

8 Alternative Operating Scenarios:

None.

9 Compliance Schedules:

None.

10. Compliance Certification Requirements:

See Section F.

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

(-) C1

Description:

Conveyor transfer points (existing & new)

Construction commenced: for existing April, 1993, and August 1, 1997, for new.

APPLICABLE REGULATIONS:

- A. 401 KAR 63:010, Fugitive emissions.
- B. 401 KAR 51:017, Prevention of significant deterioration of air quality.

1. Operating Limitations:

All conveyors shall be enclosed to assure that emissions are maintained to a minimum (i.e., Best Available Control Practice BACT).

2. Emission Limitations:

Visible emissions shall be zero percent opacity.

3. Testing Requirements:

None.

4. Specific Monitoring Requirements:

The owner shall perform operational site inspections of the affected facilities. The owner shall include, but not be limited to, the physical appearance of all equipment.

5. Specific Sampling Requirements:

None.

6. Specific Reporting Requirements:

None.

Specific Control Equipment Operating Conditions:

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

a. The permittee shall comply with the standard operating procedure (SOP) plan that was submitted to the Division.

2. The permittee shall submit updates of changes in the SOP to the Division in semi-annual reports.

8 Alternate Operating Scenarios:

None.

9 Compliance Schedules:

None.

10. Compliance Certification Requirements:

See Section F.

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

(-) D1

Description:

12 Parts cleaning tanks
Construction commenced: April, 1993

APPLICABLE REGULATIONS:

401 KAR 59:185, New solvent metal cleaning equipment.

1. Operating Limitations:

- a. The use of halogenated solvent is prohibited.
- b. The permittee shall comply with the applicable operating requirements specified in State Regulation 401 KAR 59:185, New solvent metal cleaning equipment.

2. Emission Limitations:

None.

3. Testing Requirements:

None.

4. Specific Monitoring Requirements:

None.

5. Specific Sampling Requirements:

None.

6. Specific Reporting Requirements:

None.

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

7. Specific Control Equipment Operating Conditions:

The permittee shall comply with the applicable control equipment requirements specified in State Regulation 401 KAR 59:185, New solvent metal cleaning equipment.

8. Alternate Operating Scenarios:

None.

9. Compliance Schedules:

None.

10. Compliance Certification Requirements:

See Section F.

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

(21) EG

Description:

Tunnel furnace emergency generator (1,500 KW)

Pumphouse emergency generator (1,000 KW)

Construction commenced: April, 1993

Tunnel furnace emergency generator (1500 KW)

Construction commenced: August 1, 1997

APPLICABLE REGULATIONS:

401 KAR 51:017, Prevention of significant deterioration of air quality.

1. Operating Limitations:

- a. The permittee shall use low sulfur diesel fuel in all emergency generators. (Limit on PTE).
- b. Each emergency generator shall operate no more than 60 hours in any 12 month period. (Limit on PTE).

2. Emission Limitations:

None.

3. Testing Requirements:

None.

4. Specific Monitoring Requirements:

None.

5. Specific Record Keeping Requirements:

The permittee shall keep records of each emergency generator's monthly hours of operation.

Specific Reporting Requirements:

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

The permittee shall, if requested by the Division, submit a written report within 30 days following the end of each month of the emergency generators= hours of operation.

7. Specific Control Equipment Operating Conditions:

None.

8. Alternate Operating Scenarios:

None.

9. Compliance Schedules:

None.

10. Compliance Certification Requirements:

See Section F.

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

(-)S1, (-)B1, (-)S2, (-)B2

Description:

Miscellaneous Dust Emission Units Consisting of:

(-) S1 B Existing: EAF Baghouse Dust Silo, Injection Carbon Silo, Two Granular Line Silos, Two Slag Line Silos, Two Mixture Silos

(-) B1 B Existing: Line/Carbon System B Scrap Bucket Additions: Rail & Truck Unloading Station, Carbon Silo #1, Line Silo #2, Line/Line Silo #3, Transfer into Buckets 1 & 2, Transfer into Line Silo #3

(-) S2 B New: EAF Baghouse Dust Silo, Injection Carbon Silo, Two Granular Line Silos, Two Slag Line Silos, Two Mixture Silos

(-) B2 B New: Line/Carbon System B Scrap Bucket Additions: Rail & Truck Unloading Station, Carbon Silo #1, Line Silo #2, Line/Line Silo #3, Transfer into Buckets 1 & 2, Transfer into Line Silo #3

Construction commenced: April, 1993, for existing facilities, August 1, 1997, for new facilities.

APPLICABLE REGULATIONS:

- A. 401 KAR 63:010, Fugitive emissions
- B. 401 KAR 51:017, Prevention of significant deterioration of air quality
- C. 401 KAR 59:575, Standards of performance for steel plants: electric arc furnaces and argon-oxygen decarburization vessels constructed after August 17, 1990 (401 KAR 59:060, Subpart AAa)
- D. 401 KAR 69:010, New process emissions

1. Operating Conditions:

None.

2. Emission Limitations:

- a. Except for the EAF baghouse dust silos (new and existing), visible emissions from the listed affected facilities shall not equal or exceed 20% opacity. (401 KAR 59:010).

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

b. Visible emissions from the EAF baghouse dust silos shall not equal or exceed 10% opacity, on and after the date on which the performance test required to be conducted is completed. (40 CFR 60.272b).

3. Testing Requirements:

a. With respect to the EAF baghouse dust silos (new and existing), the permittee shall comply with the requirements of 40 CFR 60.275a, test methods and procedures.

b. The permittee shall determine the opacity, during operation, from each stack or vent by Reference Method 9 on a quarterly basis, or more frequently if requested by the Administrator. If an exceedance of the opacity limit is determined, the permittee shall conduct Reference Method 9 until five consecutive monitoring days demonstrate compliance with the opacity limit.

4. Specific Monitoring Requirements:

a. The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack/vent on a weekly basis. Visual observation shall be made if any air emissions (except for water vapor) are visible from the vent/stack and the permittee shall determine whether any visible emissions are normal for the process.

b. The permittee shall determine the opacity of emissions by Reference Method 9 if visible emissions from any stack/vent is perceived or believed to exceed the applicable standard.

c. The permittee shall perform an inspection of the control equipment for any necessary repairs if visual emissions from any stack/vent is perceived or believed to be abnormal or exceed the applicable standard.

d. The permittee shall perform monthly operational status inspections of the affected facilities and the control equipment. These inspections shall include but not be limited to, the physical appearance of all affected facilities and equipment.

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain a log of the weekly qualitative visual observations of the opacity of the emissions from each stack/vent. The log shall note: (1) whether any air emissions (except for water vapor) were visible from the vent/stack; (2) all emission points from which visible emissions occurred; and (3) whether the visible emissions were normal for the process.

b. The permittee shall keep records documenting all deficiencies noted during the monthly operational status inspections and the resulting maintenance that was performed.

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

c. Maintenance records relating to opacity of emissions shall be maintained and made available for inspection by the Division upon request.

6. Specific Reporting Requirements:

Any exceedance of the opacity limit shall be reported to the Division within 30 days. For any exceedance, the company shall submit the daily, Reference Method 9, visible emission readings for each emission point, within 30 days of the end of the calendar month.

7. Specific Control Equipment Operating Conditions (Existing and New):

a. EAF Baghouse Dust Silos - Install, operate and maintain a baghouse designed to control particulate grain loading to 0.005 grain/dscf and the flow rate to 900 dscf/m (Work Practice BACI).

b. Injection Carbon Silos - Install, operate and maintain a bin vent filter designed to control particulate grain loading to 0.01 grain/dscf and the flow rate to 900 dscf/m (Work Practice BACI).

c. Granular Lime Silos - Install, operate and maintain a bin vent filter designed to control particulate grain loading to 0.01 grain/dscf and the flow rate to 900 dscf/m (Work Practice BACI).

d. Slag Conditioner Mixture Silos - Install, operate and maintain a bin vent filter designed to control particulate grain loading to 0.01 grain/dscf and the flow rate to 900 dscf/m (Work Practice BACI).

Specific Control Equipment Operating Conditions (Existing and New) Continued:

e. Truck Car Wash - Install, operate and maintain a baghouse designed to control particulate grain loading to 0.01 grain/dscf and the flow rate to 5000 dscf/m (Work Practice BACI).

f. Carbon Silos - Install, operate and maintain a bin vent filter designed to control particulate grain loading to 0.01 grain/dscf and the flow rate to 900 dscf/m (Work Practice BACI).

g. Lime Silos #2 - Install, operate and maintain a bin vent filter designed to control particulate grain loading to 0.01 grain/dscf and the flow rate to 900 dscf/m (Work Practice BACI).

h. Lime/Lime Silos #3 - Install, operate and maintain a bin vent filter designed to control particulate grain loading to 0.01 grain/dscf and the flow rate to 900 dscf/m (Work Practice BACI).

i. Transfers to Buckets 1 & 2 - Install, operate and maintain a baghouse designed to control particulate grain loading to 0.01 grain/dscf and the flow rate to 5000 dscf/m (Work Practice BACI).

**SECTION B EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS
(CONTINUED)**

j. Transfers into Bucket 3 - Install, operate and maintain a baghouse designed to control particulate grain loading to 0.01 grain/dscf and the flow rate to 5000 dscf/m (Work Practice BACT).

k. The permittee shall comply with the standard operating procedure (SOP) plan that is submitted to the Division to ensure that the specified limitations are being met. The SOP plan shall not be limited to, pressure drops, where applicable, normal visual emissions, standard maintenance schedules.

l. The permittee shall submit updates of changes in the SOP to the Division in semi-annual reports.

m. The permittee shall operate and maintain baghouses and bin vents in accordance with manufacturer's specifications and/or standard operation practices and shall report the maintenance of any deficiencies noted during monthly operational status inspections.

8 Alternate Operating Scenarios:

None.

9 Compliance Schedules:

None.

10. Compliance Certification Requirements:

a. Section F.

b. The permittee shall certify to the Division, annually, that a daily visible emission survey was conducted for each emission point that is subject to a daily visible emission survey under Section 3. The certification shall state whether the emission point was in compliance with the applicable opacity requirements.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4).

Description	Regulation
1. One HCl Dip Tank (existing)	None
2. Coil Identification System (existing)	None
3. Melt Shop Portable Arc Welders	401 KAR 63:010
4. Melt Shop Cutting Torches	401 KAR 63:010
5. Melt Shop Portable Plasma Cutter	401 KAR 63:010
6. Melt Shop Maintenance (Shell/Ladle/Tundish Repair)	401 KAR 63:010
7. Tundish Spray Station	401 KAR 63:010
8. Rolling Mill Plasma Cutter at Coiler	401 KAR 63:010
9. Caster Area Cutting Torch Drops	401 KAR 63:010
10. Cutting Torch to Ignite Oxygen Lance	401 KAR 63:010
11. Steel Ward torch	401 KAR 63:010
12. Cutting of Liquid Steel at Cleaning of Dumbbell	401 KAR 63:010
13. Caster Area Pouring in Spray Chamber	401 KAR 63:010

SECTION C - INSIGNIFICANT ACTIVITIES CONTINUED

14. Reheat Furnace Area Maintenance Welding Area 401 KAR 63:010
15. Reheat Furnace Scale Handling 401 KAR 63:010
16. 6 Stand Rolling Mill 401 KAR 63:010
17. Rolling Mill Steam Cleaners 401 KAR 63:010
18. Rolling Mill Cutting Torches 401 KAR 63:010
19. Rolling Mill Maintenance Welding Areas 401 KAR 63:010
20. Rolling Mill High Pressure Descale Operation 401 KAR 63:010
21. Roll Grinding 401 KAR 63:010
22. Scale Pits 401 KAR 63:010
23. Rolling Mill Shear Station 401 KAR 63:010
24. Portable Welders 401 KAR 63:010
25. Baghouse Portable Cutting Torches 401 KAR 63:010
26. Pump House Portable Cutting Torches 401 KAR 63:010
27. Pump House Sludge Pits 401 KAR 63:010
28. Scrap Chute 401 KAR 63:010
29. Scrap Buckets 401 KAR 63:010
30. Alloy Handling 401 KAR 63:010
31. Scrap Storage and Handling 401 KAR 63:010
32. Outside Maintenance Equipment 401 KAR 63:010

SECTION C - INSIGNIFICANT ACTIVITIES CONTINUED

- | | | |
|-----|---|----------------|
| 33. | Miscellaneous Heaters (Each Natural Gas-fired And Less Than 1 MM Btu/Hour) | None |
| 34. | Various Pieces of Mobile Equipment | 401 KAR 63:010 |
| 35. | Miscellaneous Petroleum and Non-Petroleum Storage Tanks, each with Capacity Less Than 10,567 gallons) | 401 KAR 59:010 |
| 36. | Replacement/Repair of Control Equipment | 401 KAR 63:010 |
| 37. | Parking Lots | 401 KAR 63:010 |
| 38. | Miscellaneous Kerosene Space Heaters (Seasonal Use) | None |
| 39. | Three locomotives (two existing, one new) | None |
| 40. | Emergency electric generators and emergency fire fighting water pump engines (except boilers) rated at 500 hp or less that use only gasoline, natural gas, LP gas, or distillate oil that are operated less than 500 hours per year (as verified by appropriate records). | None |
| 41. | Wastewater treatment facilities used for the sewage of the facility, excluding incineration or incineration | None |
| 42. | Laboratory fume hoods and vessels used exclusively for chemical or physical research or for bench-scale production in R&D facilities. | None |

SECTION C - SIGNIFICANT ACTIVITIES CONTINUED

43. Indirect heat exchangers or water heaters rated at 1 million BTU per hour or less actual heat input that use #2 fuel oil, wood, natural gas, LP gas, or refinery fuel gas. None
44. Use of Rolling Mill Lubricants During Hot Rolling None

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SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. The permittee shall only use natural gas as fuel in combustion emission units, except for the emergency generators which shall use diesel fuel. Each combustion unit shall be equipped with low NO_x burners unless otherwise specified herein.
2. Except as otherwise provided herein, hourly BACT emission limitations shall be based upon over three heats unless a corresponding compliance demonstration requires a longer averaging period.
3. Compliance with Work Practice BACT limitations established herein shall be based upon a one-month average.
4. Compliance with annual limitations established herein shall be based upon monthly emissions during any consecutive 12-month period.
5. No oils or lubricants shall be applied to slabs or coils, other than those approved by the Division.
6. The permittee shall take reasonable precautions to prevent particulate dust emissions from becoming airborne. Visible fugitive dust emissions beyond the property shall be minimized (401 KAR 63:010).
7. If the National Park Service demonstrates that the increase in emissions allowed by this permit adversely impact the air quality-related values of Mammoth Cave, and the Division concurs, this permit shall be re-opened in accordance with Regulation 401 KAR 50:035, Section 18 (401 KAR Part 52 & 402 KAR 51:017).

SECTION E - CONTROL EQUIPMENT CONDITIONS

Pursuant to 401 KAR 50:012, Section 1(1) and 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the cabinet which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:

- a) Date, place as defined in this permit, and time of sampling or measurements;
- b) Analyses performance dates;
- c) Company or entity that performed analyses;
- d) Analytical techniques or methods used;
- e) Analyses results; and
- f) Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and supporting information including calibrations, maintenance records, and original strip chart recordings, and all reports required by the Division for Air Quality, shall be retained at the source and this permit for a period of five years and shall be made available for inspection and request by any duly authorized representative of the Division for Air Quality.

3. The permittee shall allow the Cabinet or authorized representatives to perform the following:

- a) Enter upon the premises where a source of emissions-related activity is conducted, or where records are kept;
- b) Access to all records, at reasonable times, any records required by the permit:
 - i) During normal business hours;
 - ii) During periods of emergency when prompt access to records is essential to the assessment by the Cabinet.
- c) Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
 - i) During all hours of operation at the source,

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- ii) For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii) During an emergency; and
- d) Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
 - i) During all hours of operation at the source,
 - ii) For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii) During an emergency.
- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and associated penalties.
- 5. Reports of any monitoring required by this permit, other than continuous emission monitors, shall be reported to the Division's Florence Regional Office not later than the six-month anniversary date of this permit and every six months thereafter during the life of this permit, unless otherwise stated in this permit. All reports shall be postmarked by the 30th day following the applicable due date. Data from the continuous emission monitors shall be reported to the Technical Service Branch in the Division's Frankfurt office in accordance with the requirements of Regulation 401 KAR 50:055, General Provisions, Section 3(3). All reports shall be certified by the responsible official to Section 6(1) of Regulation 401 KAR 50:055, Permits. All data and reports from permittees shall be clearly identified in the reports.
- 6. a. In accordance with the provisions of Regulation 401 KAR 50:055, Section 1 the owner or operator shall notify the Division for Air Quality's Florence Regional Office concerning planned shutdowns or malfunctions as follows:
 - i. For planned shutdowns during any planned shutdowns and ensuing startups will exceed 24 hours notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

2. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made within 24 hours by telephone (or other electronic media) and shall cause written notice upon request.
- b. In accordance with the provisions of Regulation 401 KAR 50:035, Section 7(2)(b), the owner or operator shall provide written notification of any deviations from permit requirements, including those attributed to upset conditions to the Division of Air Quality Florence Regional Office. Prompt reports shall be defined as quarterly for any deviation related to emissions standards (other than emission exceedances covered by General Condition 6(a)) and semi-annually for all other deviations from the permit requirements if not otherwise specified in the permit.

7. Pursuant to Regulation 401 KAR 50:035 Permits, Section 7(2)(b), the permittee shall certify compliance with the terms and conditions contained in this permit, annually on the permit issuance anniversary date by completing and returning a Compliance Certification Form (DEP 7007CC) to the Division of Air Quality in accordance with the following requirements:
 - a. Identification of each term or condition of the permit that is the basis of the certification;
 - b. The compliance status regarding each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent; and
 - d. The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to 401 KAR 50:035, Section 7(1)(c),(d), and (e).
 - e. The certification shall be postmarked by the thirtieth (30) day following the applicable permit issuance anniversary date. Annual compliance certifications should be mailed to the following addresses:

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

Division for Air Quality
Florence Regional Office
8020 Ewing Boulevard, Suite 110
Florence, KY 41042

U.S. EPA Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

- e) The certification shall be postmarked by the thirtieth (30) day following the applicable permit issuance anniversary date.
8. In accordance with Regulation 401 KAR 50:035, Section 7(2)(b), the permittee shall report all information necessary to determine its subject emissions.
1. The permitting authority may require other facts beyond item 1 of condition #7 to determine the compliance status of the source pursuant to 401 KAR 50:035, Section 7(2)(d).
 2. Instrumental or non instrumental monitoring, which may consist of record keeping, may be performed in addition to or in lieu of testing to the extent necessary to yield reliable data for the purposes of verification of continuing compliance with the conditions of the permit.
9. Pursuant to Section VII.3 of the Manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, the results of performance test shall be submitted to the Division for Air Quality or its representative within forty-five days after the completion of the first test.

SECTION G - GENERAL CONDITIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. A noncompliance with this permit shall be (a) violation(s) of state regulation 401 KAR 50:035, Permit Section 12(2)(c), and (b) for federally enforceable permits is also a violation of Federal Statute 42 U.S.C. 7601 through 7671q (the Clean Air Act) and is grounds for enforcement action in accordance with 401 KAR 50:035, Section 12(2)(c). Enforcement action is not limited to the termination, revocation and reissuance or revision of this permit.
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change in ownership or control, shall not stay any permit condition.
3. This permit may be revised, revoked, reopened and reissued, or suspended for cause.
The permit will be reopened for cause only if the permittee has complied with the applicable requirements and the permit is reopened accordingly under the following circumstances:
 - a) If additional applicable requirements are added to the source and the remaining permit term is three (3) years or less, in any case, the reopening shall be completed no later than eighteen (18) months after the date of the applicable requirement. A reopening shall not be required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to Regulation 401 KAR 50:035, Section 12(2)(c);
 - b) The Cabinet of the U. S. EPA determines that the permit must be revised or revoked for noncompliance with applicable requirements; or
 - c) The Cabinet of the U. S. EPA determines that the permit contains a material mistake or that false statements were made in establishing the emissions standards or other conditions of the permit;
4. Reopening and revising a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

SECTION G - GENERAL CONDITIONS (CONTINUED)

General Compliance Requirements (Continued)

4. The permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.
5. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other condition or condition of this permit.
6. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance.
7. Except as identified as state-origin requirements in this permit, all conditions contained herein shall be enforceable by the United States Environmental Protection Agency and citizens of the United States.
8. This permit shall be subject to suspension if the permittee fails to pay all emissions taxes within 90 days after the date of notice as specified in 40 CFR Section 3(6).
9. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance.
10. This permit shall not convey property rights or exclusive privileges.
11. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal or local agency.
12. Nothing in this permit shall affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 4024, Inspections, monitoring, and entry.
13. Nothing in this permit shall alter the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 4024, 7603, Emergency orders.
14. Permit Shield: Except as provided in State Regulation 401 KAR 50:035, Permits, compliance by the affected facility with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of issuance of this permit.

SECTION G - GENERAL CONDITIONS (CONTINUED)

General Compliance Requirements (Continued):

15. The applicability of the following regulations has been investigated and found not to apply to the source for the following reasons:

<u>Regulation</u>	<u>Reasoning</u>
1. 401 KAR 63:022	Emissions below significant level
2. 401 KAR 59:155	Not a coal preparation plant
3. 401 KAR 60:042	Not an industrial generating unit
4. 401 KAR 60:043	Not an industrial generating unit.

16. All emission limitations listed in this permit shall apply at all times except during periods of start-up, shutdown, or malfunctions in accordance with State Regulation 401 KAR 59:155, general compliance requirements.

17. All permits previously issued to this source at this location are hereby null and void.

(b) Permit Expiration and Reapplication Requirements

This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of the permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division.

(c) Permit Revisions

1. A minor revision procedure may be used for permit revisions involving the use of economic incentives, flexible permit, emission trading, and other similar approaches, to the extent that these permit revision procedures are explicitly provided for in the SIP and in applicable requirements and meet the relevant requirements of Regulation 401 KAR 50:035, Section 15.

SECTION G - GENERAL CONDITIONS (CONTINUED)

Permit Revisions (continued)

2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility, and liability between the current and new permittee has been submitted to the authority prior to the transfer.

(d) Construction, Start-Up, and Initial Compliance Certification Requirements

1. The permittee shall install, calibrate, maintain, and operate devices which continuously monitor and record the NO_x and CO concentrations of the gas streams leading to each of the baghouses, or other approved locations, for E1 and E2. A NO_x continuous emission monitor (CEM) for E1 shall be installed and calibrated prior to the public notice date of the draft permit. The CEMs for NO_x and CO shall be installed and calibrated upon start-up of E2.
2. Construction of process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the requirements of this permit.
3. Within thirty (30) days following commencement of construction, or within fifteen (15) days following start-up, and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Division for Air Quality's Florence Regional Office in writing, with a copy to the Division's Frankfurt Central Office, notification of the following:
 - (a) The date of construction completion.
 - The date of start-up of the affected facilities listed in this permit.
 - The date of maximum production rate specified in the permit application is achieved.

SECTION G - GENERAL CONDITIONS (CONTINUED)

Construction, Start-Up, and Initial Compliance Certification Requirements (Continued)

4. Pursuant to State Regulation 401 KAR 50:035, Permits, Section 13(1), unless construction has commenced on or before 18 months after the date of issue of this permit, or if construction has commenced and then stopped for any consecutive period of 12 months or more, if construction is not completed within eighteen (18) months of the scheduled completion date, then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Extensions of the time periods specified herein may be granted by the Division upon a satisfactory request showing that an extension is justified.
5. Operation of the affected facilities for which construction is authorized by this permit shall not commence until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055, except as provided in this permit.
6. This permit shall allow time for the initial start-up, compliance demonstration of the affected facilities listed herein. However, within 180 days after achieving the maximum production rate at which the affected facilities are permitted but not later than 180 days after start-up of such facilities, the permittee shall conduct performance demonstration (test) on the affected facilities in accordance with Regulation 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Condition (d)6 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test.
7. Pursuant to Section VII of the policies of the Division for Air Quality as required by Regulation 401 KAR 50:016, Section 1(1), at least one month prior to the date of the performance test, the permittee shall complete and return a Compliance Test Protocol (DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, the permittee shall notify the Division of the actual test date at least ten (10) days prior to the test date.

G - GENERAL CONDITIONS (CONTINUED)

(e) Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and shall be state and federally enforceable.

(f) Emergency Provisions

1. An emergency shall constitute an affirmative defense to an action for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence:
 - i) An emergency occurred and the permittee can identify the cause of the emergency;
 - ii) The permitted facility was at the time properly operated;
 - iii) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the applicable standards or other requirements in the permit; and
 - iv) The permittee notified the Division within two working days and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency. The notice shall meet the requirements of 401 KAR 50:035, Permits, Section 7(1)(e), and include a description of the emergency, steps taken to mitigate emissions, and any corrective actions taken. This requirement does not relieve the source of other local, state or federal notification requirements.
2. The conditions in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in any applicable requirement.
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall bear the burden of proof.

SECTION G - GENERAL CONDITIONS (CONTINUED)

(g) Risk Management Provisions

The permittee shall comply with all applicable requirements of 40 CFR Part 82, Subpart F, Risk Management Plan provisions. If required, the permittee shall:

- a. Submit a Risk Management Plan to U.S. EPA, Region IV with a copy to the Division and comply with the Risk Management Program by June 21, 1999 or a later date specified by the U.S. EPA.
- b. Submit additional relevant information if requested by the Division or the U.S. EPA.

(h) Ozone Depleting Substances

1. The permittee shall comply with the standards for recycling and emissions recovery pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioning (MVACs) in Subpart B:

- a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances shall have an approved technician certification program pursuant to 40 CFR 82.157.
- d. Persons disposing of appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the record keeping requirements pursuant to 40 CFR 82.166.
- e. Persons performing commercial or industrial process refrigeration equipment shall comply with leak repair requirements pursuant to 40 CFR 82.156.

SECTION G - GENERAL CONDITIONS (CONTINUED)

Ozone Depleting Substances (Continued)

- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.